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THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte JOHN F. EISELE, VALDIS MIKELSONS, GAYE K. LEHMAN, PAUL J. WANG and PATRICIA J. A. BRANDT

Appeal No. 94-1408
Application 07/914,807[1]

HEARD: November 14, 1996

Before KIMLIN, JOHN D. SMITH and THIERSTEIN, Administrative Patent Judges.

JOHN D. SMITH, Administrative Patent Judge.

[1] Application for patent filed July 16, 1992.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-17.

Claims 1 and 11 are representative and are reproduced below:

1. An electrographic imaging sheet for use with liquid toner developers, said sheet comprising a conductive substrate selected from the group consisting of metallized polymer, metal-filled polymer, conductive particle-filled polymer and conductive polymer and on at least one surface of said substrate a layer of dielectric material between 3 and 40 micrometers in thickness, said dielectric material comprising at least one polymer comprising a silicone, said layer of dielectric having an exposed surface exhibiting dried liquid toner developer release properties characterized by a surface energy value between 14 and 20 dynes/cm^2, said surface energy having no more than 5% of the energy contributed by a polar component of the energy, and said dielectric material being substantially insoluble in hydrocarbon carrier liquid used in liquid toner developers.

11. The electrographic imaging sheet of claim 1 wherein there is no second dielectric layer between said dielectric layer and said substrate.

The references of record relied upon by the examiner are:

Crystal	4,064,312	Dec. 20, 1977
Pacansky et al. (Pacansky)	4,218,514	Aug. 19, 1980
Brandt et al. (Brandt)	5,045,391	Sept. 3, 1991

The appealed claims stand rejected under 35 U.S.C. § 103 over Brandt. The appealed claims also stand rejected under

the judicially created doctrine of obviousness-type double patenting over claims 1 and 4 of the Brandt patent. The appealed claims further stand rejected under 35 U.S.C. § 103 over Pacansky, and appealed claims 1-14 stand rejected under 35 U.S.C. § 103 over Crystal.

The subject matter on appeal is directed to an electrographic[2] imaging sheet for use with liquid toners. The sheet is comprised of a conductive substrate having thereon a layer of dielectric material comprised of a silicone polymer having a thickness between 3 and 40 microns. The silicone polymer layer also functions as a release layer for dried liquid toner, and is further defined functionally by reference to a surface energy value range and to its insolubility in the hydrocarbon carrier liquid of the toner.

As evidence of obviousness of the claimed subject matter, the examiner relies on Brandt. This patent discloses

[2] Electrography is a process for producing images by addressing an imaging surface, normally a dielectric material, with static electric charges to form a latent image which is then developed with suitable toners. The term "electrography" is distinguishable from the term "electrophotography" in which an electrostatic charge latent image is created by addressing a photoconductive surface with light. See Brandt at column 1, lines 22-31.

an image release sheet for use in electrographic processes. Brandt's sheet may be comprised of an electroconductive substrate formed from a variety of materials including separate conductive layers such as polymers containing a chloride ion (column 3, lines 44-52); a dielectric layer (column 3, line 52, to column 4, line 2) on a major surface of the electroconductive substrate; and a silicone-urea block copolymer coated on top of the dielectric layer (column 2, lines 19-21) which functions as a toner release coating.

Brandt does not expressly disclose that the silicone-urea block copolymer release layer possesses a surface energy value and toner carrier liquid insolubility as required by appellants' claims. The examiner found, however, that the surface energy values claimed are inherent in Brandt's silicone-urea copolymer coating (layer), and the examiner's finding is supported by appellants' acknowledgment (specification at page 8, lines 17-23) that Brandt's silicone-urea material may be used by itself as an intrinsic release dielectric layer in appellants' invention. It is further reasonable to conclude from the above that Brandt's release layer also possesses an inherent toner carrier liquid insolubility as required by the appealed claims. Indeed, Brandt teaches that the silicone-urea block copolymer

layer does not leach out into the toner solution. See Brandt at column 2, lines 20 and 21.

Although Brandt's silicone-urea coating is used as a separate release top-layer on a distinct dielectric layer, appealed claim 1, by virtue of its "comprising" language, does not exclude Brandt's first dielectric layer and thus the claim reads on or covers the multilayer sheet construction described by the Brandt patent.

Thus, the electrographic imaging sheet of Brandt corresponds, in all respects, to the herein claim 1 image sheet with the exception that Brandt does not expressly teach or exemplify an embodiment wherein the silicone-urea release layer is as thick (i.e. between 3 and 40 microns in thickness) as claimed by appellants. With respect to the "thickness" issue, appellants emphasize that Brandt discloses as a useful range, a thickness of 0.05-2.0 microns. Thus, appellants argue (brief, page 12) from the disclosure of Brandt at column 6, lines 53-56, that anything outside the range of 0.05-2.0 microns is necessarily an unsuitable range, and that the disclosed range cannot be construed as a preferred range as argued by the examiner. Appellants' arguments overlook the somewhat broader disclosures in Brandt that suggest that the 0.05-2.0 micron range is only an exemplified "suitable

range" and not clearly a limiting range. See the Brandt patent at column 2, lines 42-47; column 7, lines 20-25; column 9, lines 1 and 2 and lines 52 and 53. Moreover, dependent claim 4 of the Brandt patent, which defines the thickness of Brandt's silicone-urea release layer in the range of 0.05-2.0 microns, is necessarily a further limitation to independent claim 1 of the Brandt patent which functionally defines the release coating as "sufficiently thin so as to not substantially affect the dielectric properties of said substrate." Finally, we note Brandt's statement that for the coating in question, "a preferable level of measurement for dried coating thickness is in micron(s) thickness" (column 6, lines 51-53, emphasis added). Because the exemplified operable 2 micron thick coatings of Brandt are so close to the lower end of the claimed thickness range, i.e., 3 microns to 40 microns, prima facie one skilled in the art would have expected the respective release sheets to have the same properties, Titanium Metals Corp. Of America v. Banner, 778 F.2d 775, 783, 227 USPQ 773, 779 (Fed. Cir. 1985), and appellants have produced no evidence to rebut the prima facie case. Appellants' argument that the differently claimed thickness range provides an additional function, i.e., that the layer functions as a dielectric layer (brief, page 10), does not serve to distinguish the claim from Brandt and is undermined by appellants' statement that

the "intrinsic release dielectric layer of the present invention" may be "between 1 and 50 micrometers in thickness" (specification, page 7, lines 22-24). Thus, the subject matter defined by appealed claim 1 would have been considered obvious in view of Brandt. Accordingly, we affirm the examiner's rejection of appealed claim 1 under 35 U.S.C. § 103 over Brandt. Since appellants acknowledge that claims 2-10 and 14-17 stand or fall with independent claim 1 (brief, page 6), we also affirm the rejection of these claims under 35 U.S.C. § 103 over Brandt.

Appellants request special consideration of the subject matter defined by appealed claims 11 through 13. Each of these claims provides the further limitation that there is no second dielectric layer between the dielectric layer (i.e., the silicone polymer dielectric layer) and the substrate. The examiner contends that it would have been obvious for one of ordinary skill in the art to have removed the described dielectric layer of Brandt's sheet for economic reasons. However, the flaw in the examiner's argument is that Brandt did not recognize that the silicone-urea block copolymer layer is capable of functioning in a dual capacity, i.e., as both a release layer and as a dielectric layer. In the absence of such knowledge, there is no apparent reason for one of ordinary skill in the art to have made

the modification of the Brandt sheet proposed by the examiner. The rejection of appealed claims 11-13 under 35 U.S.C. § 103 over Brandt is therefore reversed.

Based on a similar analysis, we also affirm the examiner's rejection of appealed claims 1-10 and 14-17, and also reverse the rejection of appealed claims 11-13 under the judicially created doctrine of obviousness-type double patenting over claims 1 and 4 of the Brandt patent.

With respect to the claimed term "substrate" in claim 1 of the Brandt patent, appellants contend that the examiner has improperly read the disclosure of the Brandt patent into the claim. In considering the fundamental question dispositive of an obviousness-type double patenting rejection (i.e., "[d]oes any claim in the application define merely an obvious variation of an invention disclosed and claimed in the patent?"), In re Vogel, 422 F.2d 438, 441, 164 USPQ 619, 622 (CCPA 1970), it is improper to use the patented disclosure as prior art. However, as stated by the Vogel court, 422 F.2d at 441-42, 164 USPQ at 622,

> [t]his does not mean that the disclosure may not be used at all. As pointed out above, in certain instances it may be used as a dictionary to learn the meaning of terms in a claim. It may also be used as required to answer the second analysis question above.

Thus, we see no error in the examiner's reliance on the Brandt disclosure to determine the meaning of the claimed term "substrate" or to determine what thickness variations are covered by a coating broadly defined in a patented claim as "sufficiently thin so as to not substantially affect the dielectric properties of the substrate" (claim 1 of the Brandt patent).

We also disagree with appellants that the so-called two-way test discussed in In re Braat, 937 F.2d 589, 593, 19 USPQ2d 1289, 1292 (Fed. Cir. 1991), is required in the present case. As set forth in In re Goodman, 11 F.3d 1046, 1053, 29 USPQ2d 2010, 2016 (Fed. Cir. 1993), the "two-way" analysis, which precludes obviousness-type double patenting rejections unless the application claims are not patentably distinct from the claims of the prior art and vice versa, is applicable only if the application was delayed by its rate of progress through the Patent and Trademark Office over which an applicant does not have complete control. Here, there is no indication of any delayed rate of progress of the application.

Thus, we affirm the examiner's rejection of appealed claims 1-10 and 14-17 based on the judicially created doctrine of obviousness-type double patenting. We reverse the examiner's rejection of appealed claims 11-13 on the grounds of obviousness-type double patenting.

The appealed claims also stand rejected under 35 U.S.C. § 103 over Pacansky and appealed claims 1-14 stand rejected under 35 U.S.C. § 103 over Crystal. We will reverse each of these rejections essentially for the reasons stated in the brief at pages 13-17. Initially, we observe, as emphasized by appellants, that the claims on appeal are directed to electrographic imaging sheets while the Crystal and Pacansky patents relate to and disclose lithographic printing plates. Thus, an initial question is raised as to whether or not the structures disclosed by Crystal and Pacansky would function in an electrographic imaging method. In any event, it is highly speculative, as emphasized by appellants in their brief, that the silicone polymers disclosed by the relied upon references possess the properties required of the dielectric layer defined by the appealed claims. The examiner's rejections under 35 U.S.C. § 103 based on these references are therefore reversed.

In summary, the decision of the examiner refusing to allow claims 1-10 and 14-17 is affirmed. The examiner's decision refusing to allow appealed claims 10-13 is reversed. Thus, the decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

EDWARD C. KIMLIN)
Administrative Patent Judge)
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JOHN D. SMITH) BOARD OF PATENT
Administrative Patent Judge) APPEALS AND
) INTERFERENCES
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